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(54)**MAGNETORESISTANCE EFFECT COMPOSITE** HEAD, MAGNETIC **MEMORY DEVICE** EMPLOYING THE SAME, AND MANUFACTURE OF **MAGNETORESISTANCE** EFFECT COMPOSITE HEAD

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a magnetoresistance effect composite head which can pre scribe a narrow magnetic pole with a writing width of not wider than 0.5 µm with a necessary and sufficient machinning dimension tolerance.

SOLUTION: The magnetoresistance effect composite head comprises a magnetoresistance effect element 3 consisting of a spin valve element, an electrode part 5 adjacent to the element 3 and supplying a sensing current and 1st and 2nd magnetic shields 1 and 6 which hold the element 3 and the electrode part 5

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between them with reading gaps 2a and 2b therebetween. The 2nd magnetic shield 6 is used as a 1st magnetic pole, and a writing magnetic gap 7, a coil (9), coil insulation parts (10a) and (10b), a 2nd magnetic pole 8 and a protective film 11 are formed on the 2nd magnetic shield 6 to compose an inductive head.

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